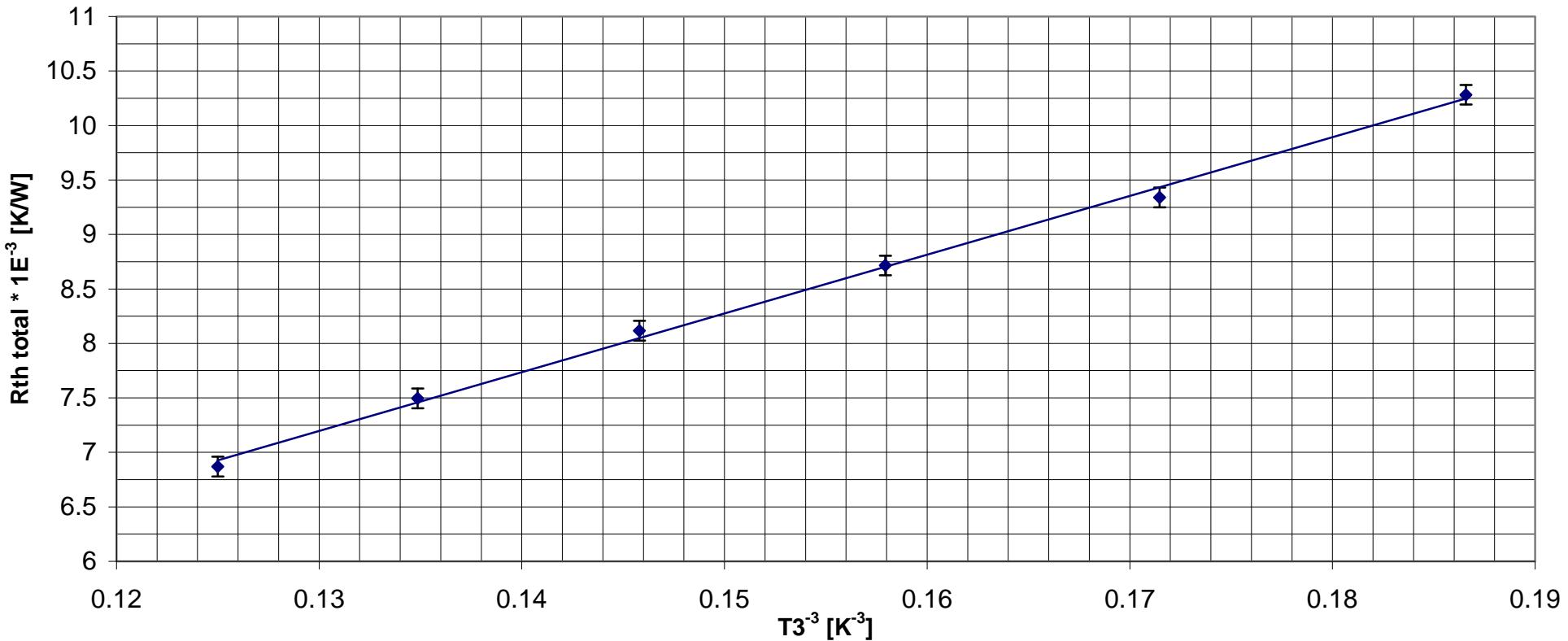


Total transverse thermal resistance and calculation of the Kapiza coefficient

$$y = 53.9x + 0.1904$$

$$R^2 = 0.9975$$



Note:

$$R_{th\ total} := \alpha \cdot \left(\frac{1}{T3^3} \right) + \beta$$

$$R_{th\ total} := 2 \cdot R_{Kapitza} + R_{Cu}$$

$$R_{th\ total} := \left(\frac{2}{C_{Kapitza} \cdot S} \cdot \frac{1}{T3^3} \right) + \frac{e}{S \cdot K_{Cu}}$$

if

$$S := 415.6 \cdot 10^{-4} \cdot m^2$$

$$e = 0.7 \cdot 10^{-3} \cdot m$$

then

$$C_{Kapitza} := 892.8 \cdot \frac{W}{K^4 \cdot m^2}$$

$$K_{Kapitza} := 0.6124 \cdot \frac{W}{K \cdot c \cdot m^2}$$

$$K_{Cu} := 88 \cdot \frac{W}{K \cdot m}$$